

DAVID W. WOLFE
Professor, School of Integrative Plant Science
Cornell University (www.hort.cornell.edu/wolfe)

ACADEMIC TRAINING

- Ph.D. Ecology, University of California, Davis, 1984
M.S. Vegetable Crops, University of California, Davis, 1981
B.S. Plant Science, University of California, Davis, 1975
Biological Sciences major, University of California, Irvine, 1970-73

FIELDS OF SPECIALIZATION

- Soil and water management, soil health, soil carbon assessment
- Climate change impacts, adaptation, mitigation, and solutions for agriculture and natural resources
- Science communication and policy on climate change and other environmental issues
- Food security and integrated landscape management

APPOINTMENTS

- 1984-present Professor of Plant and Soil Ecology, Horticulture Section, School of Integrative Plant Science, Cornell University
1981-1984 Graduate Research Associate, Land, Air, Water Resources, University of California, Davis
1978-1981 Staff Research Associate II, Vegetable Crops Extension, University of California, Davis
1975-1977 Staff Research Associate I, Land, Air, Water Resources, West Side Field Station, University of California, Davis.

CURRENT RESPONSIBILITIES

- **Research** (0.50 FTE): Soil health and water resource management; soil carbon assessment; plant and ecosystem responses to climate change and new tools for adaptation and mitigation; plant stress physiology.
- **Extension** (0.30 FTE): Soil, water, and nitrogen management in agro-ecosystems. Science communication with emphasis on soil health and climate change adaptation and mitigation strategies for managed and natural ecosystems.
- **Teaching** (0.20 FTE): PLHRT 3600 Climate Change and the Future of Food; PLSCI/COMM 3090 Experiential Writing in the Yucatan; Curriculum committee for Environmental and Sustainability Sciences (ESS) major; Curriculum committee for Climate Change minor; undergraduate and graduate student advising.

PROFESSIONAL SOCIETIES (current active memberships)

American Association for the Advancement of Science; American Society of Agronomy (Editorial Board 1997-2001); Soil Science Society of America; American Society for Horticultural Science; Ecological Society of America

RECENT PROJECT LEADERSHIP

- Lead Principal Investigator, \$800,000 NYS Department of Agriculture and Markets funded project (2017-2020): New York Soil Health (www.newyorksoilhealth.org)
- Lead Project Director, \$4.7 M USDA-NIFA/AFRI project (2011-2016): New tools and incentives for carbon, nitrogen, and greenhouse gas accounting and management in agroecosystems
- 2011, Lead and coordinating author for the Ecosystems and Agriculture teams of a New York State (NYSERDA)-funded climate change assessment (ClimAID) focused on identifying key state vulnerabilities and adaptation strategies (www.nyserda.ny.gov/climaid).

RELEVANT ADMINISTRATION AND PROFESSIONAL SERVICE (current)

- Advisory Committee, Cornell Institute for Climate Smart Solutions
- Advisory Committee, New York State Water Resources Institute
- Curriculum Committees: Cornell Environmental and Sustainability Science major, and Climate Change minor
- Board of Directors, Cayuga Lake Watershed Network
- Corporation of the Board, New York Botanical Garden

SELECTED RECENT PUBLICATIONS (career over 85 peer-reviewed journal articles, 15 book chapters, 1 book, hundreds of extension and technical report publications; Google Scholar data: over 5010 citations, h-index of 35; i10 index of 54)

- Bezner-Kerr R, S Young, C Young, V Snatoso, M Magalasi, M Entz, E Lupafya, L Dakishoni, V Morrone, D Wolfe, S Snapp. 2017. Farming for change: Development of a farmer-engaged integrated agroecology, nutrition, climate change and social equity curriculum in Malawi and Tanzania. *Agriculture and Human Values*. DOI 10.1007/s 10460-018-09906x
- Wolfe DW, A DeGaetano, G Peck, M Carey, L Ziska, J Lea-Cox, A Kemanian, M Hoffmann, D Hollinger. 2017. Unique challenges and opportunities for Northeastern U.S. crop production in a changing climate. *Climatic Change* 146: 231-245
- Sweet S, D Wolfe, A DeGaetano. R Benner. 2017. Anatomy of the 2016 drought in the Northeastern United States: Implications for agriculture and water resources in humid climates. *Agricultural and Forest Meteorology* 247: 571-581.
- Sherpa S, D Wolfe. H van Es. 2016. Sampling and data analysis optimization for estimating soil organic carbon stocks in agroecosystems. *Soil Sci. Soc. Amer. J.* 80: 1377-1392.
- Beem-Miller J, A Kong, S Ogle, D Wolfe. 2016. Sampling for soil carbon stock assessment in rocky agricultural soils. *Soil Sci. Soc. Amer. J.* 80: 1411-1423.
- Kolech SA, D Halseth, K Perry, D Wolfe, D Douches, J Coombs, W De Jong. 2016. Genetic diversity and relationship of Ethiopian potato varieties to germplasm from North America, Europe, and the International Potato Center. *Am. J. Potato Res.* 93:609-619.
- Wang J, C Wang, N Chen, Z Xiong, D Wolfe, J Zou. 2015. Response of rice to elevated CO₂ and its interaction with rising temperatures or nitrogen supply: a meta-analysis. *Climatic Change* 130: 529-543.
- Horton R, G Yohe, D Wolfe, W Easterling, R Kates, M Ruth, E Sussman, A Whelchel. 2014. Northeast (Chapter 16). IN: Mellilo J, TC Richmond, G Yohe et al. (eds.). *Third National Climate Assessment*. U.S. Global Change Research Program. Washington, D.C.
- Wolfe DW. 2013. Climate change solutions from the agronomy perspective. IN: Hillel D and C Rosenzweig (eds). *Handbook Climate Change and Agroecosystems: Global and Regional Aspects and Implications*. Chapter 2. Imperial College Press. London.
- Dietzel R, D Wolfe, JE Thies. 2011. The influence of winter soil cover on nitrous oxide emissions from agricultural soil. *Soil Biology and Biochemistry* 43:1989-1901.
- Hatfield JL, KJ Boote, BA Kimball, RC Izaurralde, D Ort, A Thomson, DW Wolfe. 2011. Climate impacts on agriculture: implications for crop production. *Agronomy Journal* 103:351-370.
- Wolfe DW, J Comstock, A Lakso, L Chase, W Fry, C Petzoldt, R Leichenko, P Vancura. 2011. Chap. 7: Agriculture. IN: Rosenzweig C, W. Solecki, A DeGaetano et al. (eds.) *Responding to Climate Change in New York State*. pp. 217-254. New York Academy of Sciences. Blackwell Pub., Boston, MA.
- Idowu OJ, HM van Es, GS Abawi, DW Wolfe, RR Schindelbeck, BN Moebius-Clune, BK Guigino. 2009. Use of an integrative soil health test for evaluation of soil management practices. *Renewable Agriculture and Food Systems* 24(3):214-224.